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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TIMOTHY M. KEISER and MICHAEL R. BURNS

Appeal 2008-1506
Application 09/382,907
Technology Center 3600

Decided: August 7, 2008

Before HUBERT C. LORIN, LINDA E. HORNER, and
DAVID B. WALKER, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Timothy M. Keiser and Michael R. Burns (Appellants) seek our review under 35 U.S.C. § 134 of the final rejection of claims 1, 3-9, and 11-14. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE.

THE INVENTION

The Appellants' Specification describes that, in addition to computer-implemented securities trading systems, most financial markets employ one or more market makers called "specialists." These specialists fill customer orders from the specialist's inventory position if there are no matches for the customer orders in the open market. The Specification describes that in the prior art, the specialist's function is performed by a firm or individual (Spec. 1:17 - 2:1). The claimed invention relates to computer-implemented securities trading including an automated specialist function to create a market for the securities traded and to lessen the volatility of smaller securities markets (Spec. 2:1-4). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method for trading a plurality of instruments in a computerized trading system that receives buy orders and sell orders for an instrument, the method comprising:

measuring an imbalance between the buy orders and sell orders for the instrument received over a given period;

computing a projected price movement based on the measured imbalance between the number of buy and sell orders;

setting a market price for the instrument based upon the received buy and sell orders and

the measured imbalance;

automatically generating additional buy orders or sell orders for the instrument at the market price to guarantee execution of some or all of the received buy or sell orders;

generating an electronic currency to execute the buy and sell orders;

crediting a first trader's account with proceeds in the electronic currency for the executed sell orders by the first trader; and

debiting a second trader's account in the electronic currency for the executed buy orders by the second trader.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Nymeyer	US 3,581,072	May 25, 1971
Fernholz	US 5,819,238	Oct. 6, 1998
Stein	US 5,826,241	Oct. 20, 1998

The following rejections are before us for review:

1. Claims 1, 3, 8, 9, 11, 13, and 14 are rejected under 35 U.S.C. § 103(a) as unpatentable over Nymeyer and Fernholz.
2. Claims 4-7 and 12 are rejected under 35 U.S.C. § 103(a) as unpatentable over Nymeyer, Fernholz, and Stein.

ISSUES

The Examiner's legal conclusion of obviousness is based on the factual finding that Nymeyer discloses automatically generating additional buy orders for the instrument at the market price to guarantee execution of some or all of the received buy or sell orders (Ans. 5, citing Nymeyer, col. 11, l. 68 – col. 12, l. 3 and Ans. 7-8). In particular, the Examiner found that Nymeyer determines "at market" orders by adding on a minimum price increment to the closing price for buy orders and reducing the closing price by one minimum increment for sell orders, so that the change to the closing price for "at market" buy and sell orders represents the claimed additional buy orders and sell orders (Ans. 7-8).

The Appellants argue that the Examiner erred in both rejections because Nymeyer does not generate additional buy or sell orders. The Appellants argue that Nymeyer merely discloses assigning a price for an existing "at market" bid or offer and that even if this assignment of price entails a change to the closing price, Nymeyer does not disclose or suggest generating additional orders (App. Br. 8).

The Examiner's legal conclusion of obviousness is also based on the factual finding that Fernholz discloses generating electronic currency. The Examiner found Fernholz shows that a custodial bank holds cash in electronic form and updates cash balances in each portfolio, which represents the generation of electronic currency in each portfolio (Ans. 8, citing Fernholz, col. 12, ll. 15-16).

The Appellants argue that “[g]enerating electronic currency is not transferring currency between banks/portfolios. Generating electronic currency is adding electronic currency to the market” (Reply Br. 6).

The issues before us are whether the Appellants have shown that the Examiner erred in finding that Nymeyer teaches or suggests automatically generating additional buy or sell orders for an instrument at the market price to guarantee execution of some or all of the received buy or sell orders and/or erred in finding that Fernholz teaches or suggests generating electronic currency, as recited in each of the independent claims.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Nymeyer describes that for a volatile market, the system uses received buy and sell orders made at specific prices to establish a new market price for a security and then assigns a price to the received “at market” (i.e., no price specified) buy and sell orders according to the established market price (Nymeyer, col. 9, l. 60 – col. 11, ll. 50).
2. In particular, Nymeyer states that it only fills orders based on the buyers and sellers existing in the open market (Nymeyer, col. 11, ll. 45-50).

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3. Nymeyer acknowledges that in a stock exchange, a specialist may purchase or sell a particular stock in order to maintain a market for the stock and prevent violent fluctuations in its price (Nymeyer, col. 1, ll. 21-24).
4. Nymeyer does not disclose, however, using its automated pricing system to automatically generate additional buy or sell orders in such a situation.
5. Fernholz describes a system to automatically rebalance holdings in a portfolio (Fernholz, col. 4, ll. 43-50).
6. Fernholz describes that since a custodial bank holds a client's securities and cash in electronic form, it can also update the balance electronically to reflect the payment of dividends for particular securities held by the client (Fernholz, col., 12, ll. 16-24).
7. While Fernholz's update to a client's cash balance might represent a transfer of electronic currency, it does not represent the generation of electronic currency.

PRINCIPLES OF LAW

Obviousness under § 103 is a two-step inquiry: the first step is a proper construction of the claims, and the second step requires a comparison of the properly construed claim to the prior art. *See Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933 (Fed. Cir. 2003).

We determine the scope of the claims in patent applications not solely on the basis of the claim language, but upon giving claims “their broadest reasonable interpretation consistent with the specification” and “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

In rejecting claims under 35 U.S.C. § 103(a), the examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *see also In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *See Oetiker*, 977 F.2d at 1445; *see also Piasecki*, 745 F.2d at 1472. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *Id.*

ANALYSIS

Each of the independent claims requires “automatically generating additional buy orders or sell orders.” We construe the word “additional” in the context of the claims to mean that buy or sell orders, in addition to the “received buy and sell orders,” are automatically generated by the computerized trading system. This is consistent with the description of the invention provided in Appellants’ Specification, which describes: “Block 502 represents the server computer 14 generating a buy or a sell order to offset the price movement” (Spec. 15:22-23). The Specification further

describes: “In order to maintain a balanced virtual specialist program portfolio, and provide some liquidity to the market, the server computer 14 generates additional buy and sell orders to offset orders generated in response to the price movement exceeding the APT [Adjusted Price Movement Threshold]” (Spec. 16:5-7). Figure 5 is a flow chart depicting the logic of the virtual specialist program, which is invoked after the system has received buy and sell orders from the open market and reviewed the orders to determine price movement in the market.

Based on this understanding of the claim language, we agree with the Appellants that the Examiner’s reading of Nymeyer is incorrect. Nymeyer describes that for a volatile market, the system uses received buy and sell orders made at specific prices to establish a new market price for a security and then assigns a price to the received “at market” (i.e., no price specified) buy and sell orders according to the established market price (Fact 1). In particular, Nymeyer only fills orders based on the buyers and sellers existing in the open market (Fact 2). So, even though Nymeyer acknowledges that in a stock exchange, a specialist may purchase or sell a particular stock in order to maintain a market for the stock and prevent violent fluctuations in its price (Fact 3), Nymeyer does not disclose or suggest using its automated pricing system to automatically generate additional buy or sell orders in such a situation (Fact 4). Rather, Nymeyer automatically assigns a price to an existing “at market” order (Fact 1).

Each of the independent claims also recites “generating an electronic currency to execute the buy and sell orders.” We interpret the word “generating” in the context of the claims to mean that the computerized trading system actually adds electronic currency to the market (e.g., virtual currency). This is consistent with the Appellants’ Specification, which describes, “according to the present invention derivative securities are traded in electronic or virtual currency known as Hollywood dollars (H\$) on the exchange” (Spec. 17:22-23). The account holder’s virtual currency can later be converted to “real” currency, such as U.S. Dollars, Euros, Yens, Rubles, etc. (Spec. 18:20-21 and 19:6-10).

Fernholz describes a system to automatically rebalance holdings in a portfolio (Fact 5). The reference to a custodial bank in Fernholz is in the context of the payment of dividends. Fernholz describes that since a custodial bank holds a client’s securities and cash in electronic form, it can also update the balance electronically to reflect the payment of dividends for particular securities held by the client (Fact 6). While this update to a client’s cash balance might represent a transfer of electronic currency, it does not represent the generation of electronic currency (Fact 7).

The Examiner did not rely on Stein for any teaching of the above-described missing elements of Nymeyer and Fernholz. As such, the Appellants have persuaded us that the Examiner failed to set forth a prima facie case of obviousness. Accordingly, we will not sustain the rejections of claims 1, 3-9, and 11-14.

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CONCLUSIONS

We conclude the Appellants have shown that the Examiner erred in rejecting claims 1, 3, 8, 9, 11, 13, and 14 under 35 U.S.C. § 103(a) as unpatentable over Nymeyer and Fernholz and erred in rejecting claims 4-7 and 12 under 35 U.S.C. § 103(a) as unpatentable over Nymeyer, Fernholz, and Stein.

DECISION

The decision of the Examiner to reject claims 1, 3-9, and 11-14 is reversed.

REVERSED

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